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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,392	10/25/2000	Jerry Moro	17900-32	4119

7590 09/20/2002

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EXAMINER

JONES, JUDSON

ART UNIT PAPER NUMBER

2834

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/696,392

Applicant(s)

MORO ET AL.

Examiner

Judson H. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 and 63-76 is/are pending in the application.
- 4a) Of the above claim(s) 31-43 and 63-76 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 and 44-61 is/are allowed.
- 6) ☒ Claim(s) 21,22 and 30 is/are rejected.
- 7) ☒ Claim(s) 23-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's arguments with respect to claims 21 and 22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 21-23 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ezekiel et al. Ezekiel et al. discloses a flux return 15, a top plate 16B, a bottom plate 16A, a magnet 13 between the top and bottom plates, and a top and bottom magnetic gap as shown in figure 2.

In regard to claims 22 and 23, the flux return is the same length as the distance between the top and bottom plates. Therefore, the flux return could be considered to be between the top and bottom plates or vice versa.

In regard to claim 30, see element 18 in figure 2 of Ezekiel et al.

Allowable Subject Matter

Claims 1-20 and 44-61 are allowed.

Claims 24-29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
The prior art of record does not disclose or teach an electromagnetic motor having a flux return including an upper pole piece, a lower pole piece and a flux stabilization ring around the upper and lower pole pieces combined with a top plate, a bottom plate, a magnet and magnetic gaps

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between the top and bottom plates as recited in claims 1 and 44. The prior art of record does not disclose or teach an electromagnetic motor having a top plate, a bottom plate, a magnet and magnetic gaps between the top and bottom plates with the top and bottom plates being saturated at a level from 10,000 to 24,000 Gauss as recited in claims 24-27. Kawamura 3,881,074 (of record) teaches saturating the pole pieces of a loudspeaker in column 4 lines 11-15, but Ezekiel et al. and Fiske, Jr. are not loudspeakers. The prior art of record does not disclose or teach an electromagnetic motor having a top plate with a top plate tip, a bottom plate with a bottom plate tip, a magnet and magnetic gaps between the top and bottom plates and the flux return as recited in claims 27-29. The prior art of record does not disclose or teach a method for minimalizing the modulation in the magnetic gap of an electromagnetic drive motor comprising saturating a top plate near a magnetic gap, saturating a bottom plate near a magnetic gap and providing a flux return where the magnetic gaps are between the flux return and the top and bottom plates as recited in claim 49. The prior art of record does not disclose or teach a method for increasing the flux lines running through a magnetic gap of an electromagnetic motor having a top plate, a bottom plate, with tips coupled to the top and bottom plates as recited in claim 58.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Grodinsky et al. 5,357,587 was cited in the office action of 5/22/2002. The office action stated, "Grodinsky et al. discloses an electromagnetic motor for a loudspeaker having a bottom plate 52 with a flux gap between the plate and a flux return path 62 but does not disclose a top plate." That statement is incorrect. There is a top plate 51 with a gap 61 between the top plate and the flux return path. See Grodinsky et al. column 4 lines 36-38. (In lines 36-38 top plate 51 is incorrectly called top plate 52.) There is no flux path shown between bottom plate 52

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and flux path 62 and therefore no magnetic gap between flux path 62 and bottom plate 52. (The term "magnetic gap" is understood by the examiner to mean a section in a magnetic flux path where there is no magnetic material.) Fiske, Jr., Yamada et al. and Menzel et al. disclose magnets between upper and lower plates with top and bottom magnetic gaps between the plates and a flux return path. See Menzel et al. figure 2, Yamada et al. figure 1 and Fiske, Jr. figure 4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H Jones whose telephone number is 703-308-0115. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JHJ
September 18, 2002

Judson H Jones
AU 2834